IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

Claims 1-12 (Canceled).

13. (Currently Amended) A base station apparatus comprising:

a plurality of antennas that transmit a plurality of differing transmission data to a plurality of mobile station apparatuses;

a storage section that stores a switching pattern, said switching pattern being stored in said storage section in advance and comprising the same number of patterns as the plurality of transmission data defining ~~that defines~~ relationships between the plurality of antennas and the plurality of transmission data at predetermined times; and

a switching section that uses said same number of patterns as the plurality of transmission data ~~the switching pattern~~ in repetition and switches around the plurality of transmission data between the plurality of antennas, wherein

said switching section makes a repeating period of said same number of patterns as the plurality of transmission data

~~switching pattern~~ equal to a time interleaving length in the transmission data.

14. (Previously Presented) The base station apparatus according to claim 13, wherein said storage section stores the switching pattern for performing the switching operation between antennas having low correlation with each other.

15. (Previously Presented) The base station apparatus according to claim 13, further comprising:

a converter that converts frequencies of the plurality of transmission data to respective frequencies different from each other, thereby performing frequency conversion,

wherein said switching section performs the switching operation on the plurality of transmission data subjected to the frequency conversion in said converter.

16. (Previously Presented) The base station apparatus according to claim 13, further comprising:

a converter that converts frequencies of the plurality of transmission data to respective frequencies different from each other, thereby performing frequency conversion,

wherein said switching section performs the switching operation on the plurality of transmission data to be subjected to the frequency conversion in said converter.

17. (Previously Presented) The base station apparatus according to claim 13, further comprising:

a converter that converts frequencies of the plurality of transmission data to respective frequencies different from each other, thereby performing frequency conversion,

wherein said converter has a plurality of synthesizers for each antenna, and performs the frequency conversion on transmission data by one synthesizer while switching a conversion frequency of another synthesizer.

18. (Currently Amended) An antenna control method employing a plurality of antennas that transmit a plurality of differing transmission data, said method comprising:

using ~~a switching pattern that defines~~ the same number of patterns as the plurality of transmission data defining relationships between the plurality of antennas and the plurality of transmission data at predetermined times in repetition and switching around the plurality of transmission data between the plurality of antennas; and

transmitting the plurality of transmission data from each of the plurality of antennas to a plurality of mobile station apparatuses, wherein

a repeating period of said same number of patterns as the plurality of transmission data ~~said switching pattern~~ is made equal to a time interleaving length in the transmission data.